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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/684,611

10/14/2003

Frank E. Semersky

1-36691

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43935

7590

12/08/2008

FRASER CLEMENS MARTIN & MILLER LLC  
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EXAMINER

VO, HAI

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

12/08/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/684,611	<b>Applicant(s)</b> SEMERSKY, FRANK E.	
	<b>Examiner</b> Hai Vo	<b>Art Unit</b> 1794	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10,22,26,38-48 and 52-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10,22,26,38-48 and 52-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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1. The art rejections Johnson et al (US 4,872,573) have been overcome in view of the present amendment. Johnson does not teach a threaded portion comprising a foam layer.
2. The art rejections over Bland et al (US 5,215,691) have been withdrawn in view of the present amendment. Bland does not teach a threaded portion as presently claimed. However, the art rejections over Clarke are maintained.

***Claim Objections***

3. Claim 39 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. "The threaded portion formed at an end of the perform" has been repeated in claim 39.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-10, 22, 26, 38-48 and 52-60 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Since the threaded portion being part of the structure of the container

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or the perform in accordance with the specification of the present invention, the threaded portion is made of the same material as the container or the perform for forming a blow molded container. However, the threaded portion as presently claimed could be made of a material that is different from container or the preform. That is not fully supported by the original disclosure of the present invention.

6. Claims 1-10, 22, 26, 38-48 and 52-60 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The threaded portion made of the same material as the container or the preform for forming a blow molded container is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). In view of the process disclosed in the present invention, the threaded portion must be made of the same material as the container or the perform for forming a blow molded container.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 22, 38-44, 47, 48, 52-54, and 57-60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. A multilayer perform could be in any configurations other than in the form of a container in accordance with the claims. This does not seem within the scope of the present invention. It is suggested that "a multilayer preform in the form of a

container” would be sufficient to overcome the 112 issues. In addition, since the threaded portion being part of the structure of the container or the perform in accordance with the specification of the present invention, the threaded portion is made of the same material as the container or the preform. However, the threaded portion as presently claimed could be made of a material that is different from container or the perform. That appears not to fall within the scope of the present invention.

With regard to claims 56 and 59, it is suggested that “a *first* outer layer and a *fifth* inner layer” are preferably incorporated into the claims for purpose of clarity.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 2, 5, 8-10, 22, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 98/16364. Clarke (US 6,358,446) will be relied on as an equivalent form of WO 98/16364 for convenience. Clarke teaches a blow molded bottle comprising three layers: an inner non-foamed layer, an intermediate foam layer and an outer non-foamed layer (column 10, lines 20-27, column 11, lines 45-65, and column 12, lines 25-50). The bottle has a threaded portion formed at its end as shown in figure 1. The foam cells are filled with carbon dioxide

(column 3, line 65 et seq.; column 9, lines 55-60). The blow molded bottle comprising two layers is contemplated by the disclosure of Clarke (see figure 1). The bottle comprises a thicker outer foam layer 6 and an inner non-foamed layer 2, 7. The foamed layer and non-foamed layer are made from polypropylene foam material. The foamed layer differs from non-foamed layer in terms of the density. Accordingly, Clarke anticipates the claimed subject matter.

11. Claims 38-40, and 42-48 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 98/16364.

Clarke (US 6,358,446) will be relied on as an equivalent form of WO 98/16364 for convenience. Clarke teaches a preform comprising three layers: an inner non-foamed layer, an intermediate foam layer and an outer non-foamed layer (column 5, lines 50-65; column 6, lines 1-25; column 10, lines 20-27, column 11, lines 45-65, and column 12, lines 25-50). The blow molded bottle comprising two layers is contemplated by the disclosure of Clarke (see figure 1). The bottle comprises a thicker outer foam layer 6 and an inner non-foamed layer 2, 7. The preform has a threaded portion formed at its end as shown in figure 1. The foam cells are filled with carbon dioxide (column 3, line 65 et seq.; column 9, lines 55-60). The foamed layer and non-foamed layer are made from polypropylene foam material. Clarke does not specifically disclose the fluid being injected in a supercritical state into a single melt of plastic. However, it is a product-by-process limitation not as yet shown to produce a patentably distinct article. It is the examiner's position that the preform of Clarke is identical to or only slightly different than the

claimed article prepared by the method of the claim, because both preforms are formed from the same materials, having structural similarity. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,291 (Fed. Cir. 1983). It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Clarke. Accordingly, Clarke anticipates or strongly suggests the claimed subject matter.

12. Claims 3, 4, 6, 7, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/16364 as applied to claims 1 and 38 above, and further in view of Hayes (US 6,485,819). Clarke does not specifically disclose the plastic resin made from polyethylene terephthalate. Hayes, however, teaches a blow molded bottle made from an aliphatic-aromatic copolyester (column 13, lines 18-45). Therefore, it would have been obvious to one having

ordinary skill in the art at the time the invention was made to substitute a copolyester for polypropylene motivated by the desire to provide a combination of higher biodegradation rate with higher thermal properties.

Clarke does not specifically disclose the use of nitrogen or an inert hydrocarbon gas as a blowing agent. Hayes teaches injection of nitrogen, carbon dioxide or an inert hydrocarbon gas into the polymeric melt to provide the desired foaming action in the melt. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute nitrogen or an inert hydrocarbon gas for carbon dioxide as a blowing agent because nitrogen, carbon dioxide and inert hydrocarbon gases are have been shown in the art to be recognized equivalent blowing agents for providing the desired foaming action in the melt.

13. The art rejections over Clarke taken individually or in combination with Hayes have been maintained for the following reasons. Applicant contends that Clarke does not teach a blow molded container wherein the threaded portion is comprised of an outer foam layer. The examiner respectfully disagrees. Clarke teaches a blow molded bottle comprising three layers: an inner non-foamed layer, an intermediate foam layer and an outer non-foamed layer (column 10, lines 20-27, column 11, lines 45-65, and column 12, lines 25-50). As the claim is not specific about the position of the outer layer relative to the container, i.e., the foam layer defining an outermost surface of the container exposed to external environment, the claimed outer layer could be of any layer of the container



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depending on the direction in which the container is looking at the container.

Accordingly, the intermediate foam layer of Clarke broadly reads on the claimed outer layer and the art rejections are thus sustained.

### ***Double Patenting***

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 1-10, 22, 26, 38-48, and 52-60 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-26 of copending Application No. 11/384,979. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '979 patent application fully encompass the claimed subject matter.

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This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

16. Since the provisional double patenting rejection is not the only remaining rejection in the Office Action, the double patenting rejection will not be withdrawn until the submission of the terminal disclaimer.

### ***Conclusion***

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on Monday through Thursday, from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hai Vo/

Primary Examiner, Art Unit 1794